

# **2002 Public Health Practice Conference**

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# Emergency Public Health

- NOT a new public health activity
- IS a new public health priority
  - ◆ Different culture
  - ◆ Different way of doing business
  - ◆ National security and law enforcement involvement



# Public Health's Role in National Security

- Disasters
- Terrorism
- High Risk Events



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# What is a Disaster?

A disaster is the result of a vast ecological breakdown in the relation between humans and their environment, a serious and sudden event (or slow, as in a drought) on such a scale that the stricken community needs extraordinary efforts to cope with it, *often with outside help or international aid*

(From Noji, Gunn and Lechat)



**Disasters, terrorism and  
other public health  
emergencies all require  
rapid mobilization of  
resources and experts  
across agencies and  
across jurisdictional  
lines**



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# Federal Level Response Plans

- National Oil and Hazardous Substances Pollution Contingency Plan (NCP)
- Federal Radiologic Emergency Response Plan
- Federal Response Plan



# Federal Response Plan

- Supports the Robert T. Stafford Disaster Relief and Emergency Assistance Act (P.L. 99-288)
- Signed by 27 federal agencies and the Red Cross
- Incident command system approach





# Federal Response Plan

- Primary Means for coordinating federal response to presidentially declared disaster
- State/local government overwhelmed



# Emergency Support Function #8 (ESF – 8): Health and Medical

- HHS is lead agency
- Assessment of health/medical needs
- Surveillance
- Medical care personnel
- Health and medical supplies
- Patient evacuation
- Hospital care
- Food/drug/medical device safety
- Worker health and safety



# State and Local Public Health

- State emergency management agencies
- Local emergency management agencies



# Terrorism

- Presidential Decision Directives (PDD) 39 and 63
- FBI Lead
- HHS Support



# Public Health Role in Biological Terrorism and Emergencies

- We now know:
  - ◆ Lab
  - ◆ Epi
  - ◆ Environmental sampling
  - ◆ Clean up
  - ◆ Etc.



# Public Health Role in Nuclear, Radiologic and Chemical Emergencies

- Health and medical evaluation and recommendations
- Worker health and safety
- Risk assessment and communication
- Population monitoring and follow up
- Exposure assessment
- Etc.



# To be Prepared, What Does Public Health Need

- Incident command and support structure
- Preparedness and response plans
- Communications
- Epidemiology and surveillance
- Laboratory
- Environmental/occupational health



# NYC as a Case Study

**Starting Sept. 11:**

- **Participation in incident command structure**
- **Syndromic surveillance**
- **Worker health and safety**
- **Health assessment due to environmental contamination**
- **National Pharmaceutical Stockpile**





# NYC as a Case Study

## NBC Anthrax letter:

- Evaluation of exposed
- Environmental sampling
- Antibiotic prophylaxis
- Decontamination
- More surveillance
- Communication
- Huge laboratory demand



# Some Lessons Learned

- Communication: Media, public information, health care community
- Operations Issues: how to manage a large event
- Lack of science
- Components of response teams
- Worker health and safety
- Capacity to deal with environmental health issues



# CDC's Anti-terrorism Programs

- **Bioterrorism Preparedness and Response Program:**
  - state/local preparedness
  - epidemiology and surveillance
  - chem lab
  - bio lab
  - Health Alert Network and Epi-X
- **National Pharmaceutical Stockpile**



# Focus Areas

- A – Preparedness Planning and Readiness Assessment
- B – Surveillance and Epidemiology Capacity
- C – Laboratory Capacity - Biological
- D – Supplemental Funding not available
- E – Health Alert Network/Communication and Information Technology
- (NEW) F – Communicating Health Risks and Health Information Dissemination
- (NEW) G – Education and Training



# Funds Distribution

- 20% - Available immediately
- 80% - Restricted until work plan approved – now available
  - ◆ A – 20
  - ◆ B – 20
  - ◆ C – 13
  - ◆ D – 0
  - ◆ E – 12
  - ◆ F – 5
  - ◆ G – 10

**Based on priorities and  
Congressional Intent**



# State and Local Collaboration

- Language determined in collaboration with ASTHO and NACCHO
- Based on ensuring benefits are delivered where the capacities are developed
- Evidence needed that demonstrates meaningful collaboration
  - ◆ Direct involvement in the projects work plan development
  - ◆ Letters of support from key local health agencies where appropriate



# Program Requirements

- **Critical Capacities:**
  - ◆ Include the 14 Critical Benchmarks
  - ◆ Defined as: the core expertise and infrastructure to enable public health systems to prepare for and respond to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies.
  - ◆ Activities that may be considered: Examples of activities related to the Critical Capacity.
  - ◆ These must be addressed in the work plan before Enhanced capacities are addressed.



# Program Requirements

- **Enhanced Capacities:**
  - ◆ **Defined as: the additional expertise and infrastructure (i.e., over and above the Critical Capacities) to enable public health systems to have optimal capacities to respond to bioterrorism, other infectious disease outbreaks, and other public health threats and emergencies.**
  - ◆ **If selected, these must also be addressed in the work plan similar to the Critical Capacities.**





# National Pharmaceutical Stockpile (NPS) Program

## Mission

To maintain a *national repository* of life-saving pharmaceuticals and medical materiel that will be rapidly delivered to the site of a chemical or biological terrorism event in order to reduce morbidity and mortality in civilian populations.

## Funding

- FY 99 (Start of Program) - \$51 million
- FY 00 - \$52 million
- FY 01 - \$52 million
- FY 02 (after 9/11) - \$645 million



# NPS Concept of Operations

- Provide broad spectrum of support very rapidly for ill-defined threats
- Provide specific materiel to target specific threats when known
- Provide technical assistance before and during an event



# **NPS Concept of Operations**

## **Response Options**



- 1. 12-Hour Push Packages**
- 2. Vendor Managed Inventory (VMI) Packages**
- 3. Storage & Rapid Deployment of Vaccines and Antitoxin**
- 4. Buying Power/Surge Capacity**
- 5. Technical Assistance**



# NPS Formulary Development

- Based on Category A Threat Agents
- Contents Selected by Ongoing Series of Subject Matter Expert Meetings
  - ◆ Experts in emergency and public health response to biological, chemical, nerve, radiological threat agents as well as pediatrics, infectious disease, critical care, and emergency
  - ◆ Government and non-Government representation



# NPS Contents

- **Pharmaceuticals:**

- ◆ Antibiotics (unit-of-use and bulk)
- ◆ Mark I kits, diazepam, atropine, pralidoxime
- ◆ Emergency medications (medicines for hypotension, anaphylaxis, sedation, pain management)

- **IV Supplies:**

- ◆ Catheters, syringes, fluids, administration sets



# NPS Contents, *cont'd*

- **Airway Management Supplies:**
  - ◆ Ambu-bags, ET tubes, laryngoscopes, suction devices, oxygen masks, NG tubes, ventilators
- **Bandages and Dressings**
- **Pill Counting/Packaging Devices**
  - ◆ High speed packaging machines, table top pill counters, volumetric measuring devices



# NPS Contents, *cont'd*

- **Vaccines and Antitoxins**
  - ◆ Smallpox vaccine, Anthrax vaccine and Botulinum antitoxin stored separately from 12-hour Push Packages and VMI
  - ◆ Shipped on event-specific basis



# **NPS Program Role in CDC's Smallpox Response Plan**

- **Smallpox vaccine  
stored at regional NPS  
repositories throughout  
U.S**
- **Developed system to  
deliver vaccine to states  
for entire U.S. population**





# **NPS Program Role in CDC's Smallpox Response Plan, *cont'd***

## **CDC's First Response**

- **NPS Program can move up to 75 million doses on first day (150,000 doses per vaxicool kit)**
- **NPS Program will assist in mobilization of CDC's Smallpox Response Teams**



# **NPS Program Role in CDC's Smallpox Response Plan, *cont'd***

## **Large Scale Mobilization**

- Will ship to all cities nationwide  $\geq 10,000$  people in 5-7 days
- States to stipulate delivery sites prior to need
- Commercial partners will provide transportation
- Shipments will contain
  - ◆ Vaccine
  - ◆ Diluent
  - ◆ Bifurcated Needles
  - ◆ Transfer Needles
- Vaccinia Immune Globulin (VIG) will be shipped as supplies become available and as need is validated



# Questions????????



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